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Cadherin EGF LAG seven-pass G-type receptor 2 (NP_001399)

Accepted Sequence

MRSPATGVPL	PTPPPLLLLL	LLLLLPPPLL	GDQVGPCRS	GSRGRGSSGA	CAPMGWLCPS	60
SASNLWLYTS	RCRDAGTELT	GHLVPHHDGL	RVWCPESEAH	IPLPPAPEGC	PWSCRLLGIG	120
GHLSPQGKLT	LPEEHPCLKA	PRLRCQSCKL	AQAPGLRAGE	RSPEESLGGR	RKRNVTAPQ	180
FQPPSYQATV	PENQPAGTPV	ASLRAIDPDE	GEAGRLEYTM	DALFDSRSNQ	FFSLDPVTGA	240
VTAEELDRE	TKSTHVFVRT	AQDHGMPRRS	ALATLTILVT	DTNDHDPVFE	QQEYKESLRE	300
NLEVGYEVL	VRATDGDAPP	NANILYRLLE	GSGGSPSEVF	EIDPRSGVIR	TRGPVDREEV	360
ESYQLTVEAS	DQGRDPGPRS	TTAAVFLSVE	DDNDNAPQFS	EKRYVVQVRE	DVTPGAPVLR	420
VTASDRDKGS	NAVHYSIMS	GNARGQFYLD	AQTGALDVVS	PLDYETTKEY	TLRVRAQDGG	480
RPPLSNVSG	VTVQVLDIND	NAPIFVSTPF	QATVLESVPL	GYLVLVHVAI	DADAGDNARL	540
EYRLAGVGHD	FPFTINNGTG	WISVAAELDR	EEVDYFYSFGV	EARDHGTPAL	TASASVSVTV	600
LDVNDNNPTF	TQPEYTVRLN	EDAAVGTSVV	TVSAVDRDAH	SVITYQITSG	NTRNRFSITS	660
QSGGGLVSLA	LPLDYKLERQ	YVLAVTASDG	TRQDTAQIVV	NVTDANTHRP	VFQSSHYTVN	720
VNEDRPAGTT	VVLISATDED	TGENARITYF	MEDSIPQFRI	DADTGAVTTQ	AELDYEDQVS	780
YTLAITARDN	GIPQKSDTTY	LEILVNDVND	NAPQFLRDSY	QGSVYEDVPP	FTSVLQISAT	840
DRDSGLNGRV	FYTFQGGDDG	DGDFIVESTS	GIVRTLRLRD	RENVAQYVLR	AYAVDKGMPP	900
ARTPMEVTVT	VLDVNDNPPV	FEQDEFDFVF	EENSPIGLAV	ARVTATDPDE	GTNAQIMYQI	960
VEGNIPEVFQ	LDIFSGELTA	LVDLDYEDRP	EYVLVIQATS	APLVSRAVH	VRLDRNDNP	1020
PVLGNFEILF	NNYVTNRSSS	FPGGAIGRVP	AHDPDISDSL	TYSFERGNEL	SLVLLNASTG	1080
ELKLSRALDN	NRPLEAIMSV	LVSDGVHVS	AQCALRVTH	TDEMLTHSIT	LRLEDMSPER	1140
FLSPLLGLFI	QAVAATLATP	PDHVVFVNVQ	RDTDAPGGHI	LNVSLSVGQP	PGPGGGPPFL	1200
PSEDLQERLY	LNRSLLTAIS	AQRVLPFDDN	ICLREPCENY	MRCVSVLRFD	SSAPFIASSS	1260
VLFRPIHPVG	GLRCRCPPGF	TGDYCETEVD	LCYSRPCGPH	GRCRSREGGY	TCLCRDGYTG	1320
EHCEVSARS	RCTPGVCKNG	GTCVNLLVGG	FKCDCPSGDF	EKPVCQVTTR	SFPAHSFITF	1380
RGLRQRFHFT	LALSFAKER	DGLLLYNGRF	NEKHDFVALE	VIQEQVQLTF	SAGESTTTVS	1440
PFVPGGVSDG	QWHTVQLKYY	NKPLLQGTGL	PQGPSEQKVA	VVTVDGCDTG	VALRFGSVLG	1500
NYSCAAQGTQ	GGSKKSLDLT	GPLLLGGVPD	LPESFPVRMR	QFVGCMRNQ	VDSRHIDMAD	1560
FIANNGTVP	CPAKKNVCD	NTCHNGGTCV	NQWDAFSCEC	PLGFGGKSCA	QEMANPQHFL	1620
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CLLCDCYPTG	SLSRVCDPED	GQCPCPKPGVI	GRQCDRCNDP	FAEVTNNGCE	VNYDSCPRAI	1980
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VVFRNESHVS	CQCNHMTSFA	VLMDVSRREN	GEILPLKTLT	YVALGVTLAA	LLLTTFFLTL	2400
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ALHLYRALTE	VRDVNTGPMR	FYYMLGWGVP	AFITGLAVGL	DPEGYGNPDF	CWLSIYDTLI	2520
WSFAGPVAF	VSMSVFLYIL	AARASCAAQR	QGFEKKGVP	GLQPSFAVLL	LLSATWLLAL	2580
LSVNSDTLLF	HYLFATCNCI	QGPFIFLSYV	VLSKEVRKAL	KLACSRKPSP	DPALTTKSTL	2640
TSSYNCPSPY	ADGRLYQPYG	DSAGSLHSTS	RSGKSQPSYI	PFLLRREESAL	NPGQGPPGLG	2700
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RPPPRQSLQE	QLNGVMPIAM	SIKAGTVDED	SSGSEFLFFN	FLH		2923

Molecular Weight = 317469.84

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Last Updated: May 26, 1999



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20



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1: NP_001399. cadherin EGF LAG ...[gi:13325064]

BLink, Domains, Links

LOCUS NP_001399 2923 aa linear PRI 20-DEC-2003

DEFINITION cadherin EGF LAG seven-pass G-type receptor 2; EGF-like-domain, multiple 2; epidermal growth factor-like 2; multiple epidermal growth factor-like domains 3 [Homo sapiens].

ACCESSION NP_001399

VERSION NP_001399.1 GI:13325064

DBSOURCE REFSEQ: accession NM_001408.1

KEYWORDS .

SOURCE Homo sapiens (human)

ORGANISM Homo sapiens

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1 (residues 1 to 2923)

AUTHORS Vincent,J.B., Skaug,J. and Scherer,S.W.

TITLE The human homologue of flamingo, EGFL2, encodes a brain-expressed large cadherin-like protein with epidermal growth factor-like domains, and maps to chromosome 1p13.3-p21.1

JOURNAL DNA Res. 7 (3), 233-235 (2000)

PUBMED 10907856

REFERENCE 2 (residues 1 to 2923)

AUTHORS Wu,Q. and Maniatis,T.

TITLE Large exons encoding multiple ectodomains are a characteristic feature of protocadherin genes

JOURNAL Proc. Natl. Acad. Sci. U.S.A. 97 (7), 3124-3129 (2000)

PUBMED 10716726

REFERENCE 3 (residues 1 to 2923)

AUTHORS Wu,Q. and Maniatis,T.

TITLE A striking organization of a large family of human neural cadherin-like cell adhesion genes

JOURNAL Cell 97 (6), 779-790 (1999)

PUBMED 10380929

REFERENCE 4 (residues 1 to 2923)

AUTHORS Nakayama,M., Nakajima,D., Nagase,T., Nomura,N., Seki,N. and Ohara,O.

TITLE Identification of high-molecular-weight proteins with multiple EGF-like motifs by motif-trap screening

JOURNAL Genomics 51 (1), 27-34 (1998)

PUBMED 9693030

COMMENT REVIEWED REFSEQ: This record has been curated by NCBI staff. The reference sequence was derived from AF234887.1.

Summary: The protein encoded by this gene is a member of the flamingo subfamily, part of the cadherin superfamily. The flamingo subfamily consists of nonclassic-type cadherins; a subpopulation that does not interact with catenins. The flamingo cadherins are located at the plasma membrane and have nine cadherin domains, seven epidermal growth factor-like repeats and two laminin A G-type repeats in their ectodomain. They also have seven transmembrane domains, a characteristic unique to this subfamily. It is

postulated that these proteins are receptors involved in contact-mediated communication, with cadherin domains acting as homophilic binding regions and the EGF-like domains involved in cell adhesion and receptor-ligand interactions. The specific function of this particular member has not been determined.

FEATURES	Location/Qualifiers
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